

TABLE 1
LaSal/Snowball Vent Hole Surety Estimate

Vent Holes	Number of Vent holes	Quantity	Unit	Unit Cost	Estimated Cost
Excavate around vent hole (8 bcy/vent) (a)	3	1	day	\$1,326.80	\$1,327
Backfill Vents					
- Volume = $4^2 * \pi * 750'$ deep	3	113,112	CF		
- Volume = 113,112 CF/27 = CY	3	4,189	CY		
- No. truck loads – 20 CY/Truck	3	209	loads		
- Load = 4 min/truck = $(209*4)/60 = 14$ hrs		14	hours	\$90	\$1,260
- Haul = 4 loads/hr = $209/3 = 70$ hrs.		70	hours	\$85	\$5,922
Vent hole Diffuser Demolition (c)	3	144	CF	\$0.28	\$40
Vent Hole Pads (grading & ripping)	3	0.75	AC	\$978.00	\$734
Vent Hole Roads (grading & ripping)	1	0.8	AC	\$978.00	\$782
Revegetating Disturbed Vent Hole Areas (d)	3	0.75	AC	\$403.10	\$302
Revegetating Disturbed Roads (d)	1	0.8	AC	\$403.10	\$322
Cleanup and Removal Costs (e)	1	1	day	\$850.00	\$850
Mob/Demob Rig for wet hole closure (f)	1	1	LS	\$7,100.00	\$7,100
Closure of 36 wet holes (36 holes*300FT) (f)	36	4.25	LF	\$45,900.00	\$45,900
Surface Cap for Holes (f)	36	210	Ea	\$7,560.00	\$7,560
Subtotal					\$72,099

Contingency (10%)	\$7,210
Subtotal	\$79,309
Management (10%)	\$7,931
Subtotal	\$87,240
Escalation (3.2% per year for 3 years)	\$95,886

Total Cost Estimate for Pandora Vent Holes: \$95,886

Notes:

- (a) Assume that a hydraulic excavator can excavate around a vent hole in 45 minutes and tram to next vent hole (ave. 1/6-mile) in 15 minutes. Allow 1 hour for initial tramping from main site to first vent hole.
- (b) Cost was estimated based on industry knowledge.
- (c) At each vent hole, a 4-foot high diffuser and approximately 4 feet of casing will be removed and disposed. The 8-foot height was multiplied by the number of vent holes (3) to calculate a total height of 24 feet. The diffusers and casing are typically 5 to 6 feet in diameter.
- (d) Seed mix assumed is an agency approved seed mix (\$203.10 per acre) with a \$200 application unit cost.
- (e) Clean up and removal costs are estimated to be one, ten hour day at \$85.00 per hour.
- (f) Costs were provided by UDOGM on 11.17.2009, as typical wet hole closure costs.

RECEIVED E-Mail

NOV 17 2009

Div. of Oil, Gas & Mining